

### Remarks

#### Amendments to Drawings

The Examiner has requested that Figures **1b** to **1d** be amended to indicate that they show only “Prior Art”.

In the case of Figure **1b**, although the Examiner is correct in noting that Figure **1b** is provided for the purpose of illustrating a number of old art features, (as indicated in the present disclosure at page 2, lines 1-3), Figure **1b** was created contemporaneously with preparation of the present application. As such, it is not a “Prior Art” illustration, per se. The applicant does not know whether the combination of features shown in Figure **1b** is old. Therefore it is not clear that labelling Figure **1b** as “Prior Art” would be accurate. In that light the Applicant has not made the amendment requested by the Examiner.

The Applicant has not labelled Figure **1c** as “Prior Art” because it is not prior art.

The Applicant has not labelled Figure **1d** as “Prior Art” because it is not prior art.

#### Amendment of Claim 6

Claim 6 has been amended to provide proper antecedent structure as requested by the Examiner.

#### Claim 1

Claim 1 has been rejected by the Examiner under 35 USC 102 as being anticipated by US Patent 2,078,176 of Hartwig. The applicant respectfully traverses the rejection, and requests that it be reconsidered.

It is important to note that in Hartwig, flange plate **10**, flange plate **100**, and flange plate **200** are each part of the center plate. Neither flange plate **10**, nor flange plate **100**, nor flange plate **200** is part of the rail road car body to which the center plate is to be attached.

This is made clear by Hartwig’s description and claims.

Col. 1, lines 4 – 9:

“More particularly, the invention pertains to a center plate construction for railway vehicles and has *for its principle object the provision of a center bearing comprised of more than one part and reduced to a unitary structure by welding.*” (Emphasis added).

Col. 2, lines 5 – 9:

“The parts *comprising the center plate* are each of them readily fabricated. The bowl **13** may be a simple forging, and the flange plate **10** merely requires the provision of the central hole **11** and perforations **12**.” (Emphasis added).

Col. 2, lines 44 – 47:

“From the foregoing it will be seen that there may be provided a fabricated center plate that is readily adapted to welding, having a hollow annular box section bearing of utmost strength.”

Col. 2, lines 54 et seq.:

“What I claim is –

1. A fabricated center plate comprising a plate member and a hollow bowl member integrally secured together.”

Claims 2 – 12 continue with the same theme.

In each case, the interface for mounting to the center sill of the rail road car is the upper surface of the flange plate, be it **10**, **100** or **200**, that has, for example “...perforations **12** for rivets or other fastening means for attaching the plate member to a vehicle or truck, and a bowl **13** of annular channel configuration. The flange plate **10** is preferably flat to provide a complete surface engagement with the part to which it is to be attached.” (Hartwig, Col. 1, lines 33 – 37).

It may be noted that in each of the three versions shown and described by Hartwig, the central boss does not extend past the interface (i.e., upper) surface of the flange plate, be it **10**, or **100**, or **200**. Therefore, in contrast to the presently claimed invention of claim 1, Hartwig does not have “an integrally formed central portion for accommodating a king pin, the central portion standing taller than said mounting interface.” As such, the applicant respectfully submits that claim 1 is not anticipated by Hartwig.

Further still, in each of the three embodiments shown and described by Hartwig, the radially outermost portion of Hartwig’s center plate would be the corners of the flange plate. It

is clear that these corners would not be "... seatable within the centerplate bowl of a railroad car truck."

Claim 1 requires the centerplate to have a radially outermost portion. What is the radially outermost portion of Hartwig? The Office Action identifies Hartwig item **116** as being the radially outermost portion or wall. The applicant respectfully submits that this interpretation is not supported by Hartwig, and, indeed, contradicts what Hartwig shows and claims. By inspection of Hartwig's illustrations, item **116** is not radially outermost as compared to any of flange plates **10**, **100**, or **200**. Hartwig explicitly tells us that flange plates **10**, **100** and **200** are part of the center plate, and claims them as such. Therefore, item **116** cannot be interpreted as being the "radially outermost" portion of Hartwig's center plate as called for in claim 1, and all claims dependent therefrom.

For these reasons, the applicant respectfully submits that claim 1, and all claims dependent therefrom, namely claims 2 – 10, are not anticipated by Hartwig, and are allowable thereover.

#### Claim 2

Claim 2 has also been rejected under 35 USC 102 as being anticipated by Hartwig.

In addition to the foregoing commentary, the applicant notes that Hartwig's center plate is not a monolith, but, on the contrary, Hartwig explicitly states, as quoted above, that "More particularly, the invention pertains to a center plate construction for railway vehicles and has *for its principle object* the provision of a center bearing comprised of *more than one part* and reduced to a unitary structure by welding." (Emphasis added).

It cannot therefore be said that Hartwig shows, describes, or suggests a monolithic centerplate. The applicant requests reconsideration of the rejection and allowance of the claim.

#### Claim 3

Claim 3 has been rejected under 35 USC 103 as being obvious given Hartwig.

The test for obviousness requires that the cited art, whether alone or in combination, show or describe all of the features of the claimed invention. The applicant notes that claim 3 is

missing the same features as are missing from claim 1, and for that reason alone claim 3 is presently allowable over Hartwig. Further, Hartwig claims a *fabricated* center plate, meaning in this instance a welded assembly (see the passages quoted above, and Hartwig's claims).

The applicant respectfully submits that whether a person skilled in the art would be aware of forging and casting, and whether or not Official Notice is taken that forging and casting are well known in the railroad industry, the issue is whether they are, in fact, "well known alternate methods of metal forming" in the present circumstances and whether there is any suggestion that Hartwig's assembly be modified to be made as a casting. Note that Hartwig employs welded fabrication to obtain a hollow annular box, a subject that is both one of Hartwig's explicitly stated objects (see Col. 1, lines 10 – 15) and the substance of Hartwig's claims (see Hartwig claims 2 – 11). The applicant respectfully submits that persons skilled in the art might well not think that casting would be a "well known alternate method" of forming a closed hollow annular box, since casting the internal hollow would not seem to be a trivial exercise.

Further, there cannot be suggestion or motivation to remove Hartwig's flange plates, since they are part of his claimed invention, and part of his "objects". Further still, given Hartwig's objectives, it is difficult to see how Hartwig, who clearly advocates fabrication, could be interpreted as suggesting casting, since, for the purpose of Hartwig's invention, the processes do not appear to be equivalent alternatives.

The applicant respectfully requests reconsideration of the rejection of claim 3 and allowance of the claim.

#### Claim 4

Claim 4 has been rejected under 35 USC 102 as being anticipated by Hartwig.

The applicant respectfully notes that the radially outermost portion of each of Hartwig's embodiments are the corners of plates 10, 100 and 200. These do not define an upstanding peripheral wall that is seatable within the centerplate bowl of a railroad car truck. The applicant therefore requests reconsideration of the rejection, and allowance of the claim.

#### Claim 5

Claim 5 has been rejected under 35 USC 102 as being anticipated by Hartwig. Claim 5 calls for the upstanding peripheral wall, which is, as may be recalled, the radially outermost portion of the centerplate of claim 4, to be circular. While item 116 may be circular, as discussed above it does not satisfy the “radially outermost” language of the claim. The applicant respectfully submits that Hartwig’s flange plates 10, 100 and 200, that include the radially outermost portions of Hartwig’s center plate, are not circular. The applicant therefore requests reconsideration of the rejection and allowance of the claim.

#### Claim 6

Claim 6 has been rejected under 35 USC 102 as being anticipated by Hartwig.

In consequences of the formal rejection, claim 6 has been amended to indicate that there is a welding relief formed radially outwardly of the upwardly oriented mounting interface. While Hartwig has a welding relief 117 between Hartwig’s bowl 116 and Hartwig’s various plates 10, 100 or 200, Hartwig does not have a welding relief adjacent to the upwardly facing interface surface of the center plate, whichever embodiment may be chosen. On the contrary, Hartwig indicates that the plates are to be attached through “perforations 12” by “rivets or other fastening means”, as noted above. The applicant respectfully submits that claim 6 is therefore not anticipated by Hartwig and requests allowance of the claim.

#### Claim 7

The same commentary applies to claim 7 as to claim 6

#### Claim 8

Claim 8 has been rejected under 35 USC 102 as being anticipated by Hartwig, or, alternatively, under 35 USC 103 as being obvious given Hartwig in light of US Patent 3,831,530 of Cope.

The applicant agrees with the Examiner that apertures 12 in Hartwig’s plate 10, 100, or 200, if not the plates themselves, may be indexing members. That interpretation agrees with, and supports, the grounds of traverse of the rejections of claims 1 – 7 and 9 – 20 provided herein by the Applicant. Employing that interpretation of Hartwig’s flange plates, then, by the

interpretation of the claim language used in the Office Action itself, the rejections of claims 1 – 7 and 9 - 20 cannot stand.

For this reason, if no other, the applicant submits that claims 1 – 7 and 9 – 20 are allowable over the cited art. Returning then to claim 8, and adopting the interpretation employed in the rejection of claim 8, claim 8 is allowable because Hartwig lacks the features of claim 1 from which claim 8 depends, as discussed above, and that is so whether the rejection is made under 35 USC 102 or 35 USC 103.

#### Claim 9

Claim 9 has been rejected under 35 USC 103 as being obvious given Hartwig in light of US Patent 3,831,530 of Cope et al.

The applicant respectfully traverses this rejection, for all of the reasons applicable to claim 8, and for additional reasons.

As a preliminary matter, the Office Action speaks of "...the reinforcing webs of Hartwig, as modified ...". Given that Hartwig does not have "reinforcing webs", the applicant has guessed that the sentence was intended to refer to Cope, not Hartwig, in two places.

It is important to understand that Cope's webs are not indexing features as claimed. Consider the nature of Cope's plug-shaped centerplate body. This body has tapered walls that have a rectangular or square plan form. This square plug fits into a big hole in the center sill. When this kind of plug-shaped center plate body is used, the webs would not tend to be indexing members for two reasons: (a) the hole itself might tend to leave nothing for the webs to engage; and (b) the indexing function might tend to be redundant given that the hole is not round, and the mating plug is also not round.

Further, there would be no point in using Cope's webs in Hartwig's centerplate as indexing members, given that Hartwig already has indexing members, such as apertures 12. They would, again, seem to be redundant. Further still, the devices shown by Hartwig and Cope tend to represent two quite different approaches. These two types tend to be an "either or" proposition. The pan style centerplates, like Hartwig, bolt to the underside of the centersill at the main bolster junction and rely on the mating of the flat upper surface with the desirably flat lower surface of the underframe at the truck center. A separate web structure with a center for

the king pin may be mounted in the center sill. By contrast, the plug style center plates as might be exemplified by Cope et al., carry their own center for the pin, and rely on the fit of the tapered plug in the hole, about which a rectangular peripheral weld is formed. There is no readily apparent reason why a person skilled in the art would be motivated to combine the features of one with the other.

#### Claim 10

Claim 10 indicates that the radially outermost portion of the center plate casting seats entirely within the centerplate bowl. Hartwig's plates **10**, **100** and **200** would clearly not do this. Further, the portion of Hartwig that would fit within the bowl is not the radially outermost portion, and does not have an upwardly oriented abutment for rigid connection to the railroad car. Therefore, Hartwig does not anticipate the claim.

#### Claim 11

Claim 11 relates to a center plate casting. As acknowledged in the Office Action, Hartwig is not a center plate casting. Further, as noted above, given Hartwig's claimed invention of a hollow box, the Applicant respectfully submits that casting is not an alternate that would immediately suggest itself.

#### Claim 12

Claim 12 has been rejected under 35 USC 102 as being anticipated by Hartwig. The applicant traverses this rejection. The applicant notes that:

- (a) flange plate **10**, or **100**, or **200** of Hartwig is part of Hartwig's center plate, as made clear in Hartwig's description and claims;
- (b) flange plate **10**, or **100**, or **200** extends radially well beyond the peripheral wall (**16** or **116**) that stands upwardly from the bearing surface (**13** or **113**) of the center plate; and
- (c) claim 12 indicates that the center plate is "free of any member extending radially beyond said peripheral wall.

Therefore, the applicant respectfully submits that Hartwig does not have all of the elements of the claim, and therefore does not anticipate the claim under 35 USC 102. The applicant requests reconsideration of the rejection and allowance of the claim.

Claim 13

The applicant agrees with the interpretation of Hartwig's plate **100**, or at least to the extent that apertures **12** thereof might be interpreted as upwardly oriented indexing members, and, as in the case of claim 8, respectfully submits that such an interpretation agrees with, and supports, the Applicant's arguments against the current rejection of claim 12 (and of claims 1 – 11, and 14 – 20).

Since the applicant submits that claim 12 is allowable, the applicant also submits that claim 13, which depends from claim 12, is also allowable. The applicant respectfully requests reconsideration of the rejection of claim 13, and allowance of the claim.

Claim 14

The applicant repeats the commentary made in the context of dependent claim 6, and requests reconsideration of the rejection and allowance of the claim.

Claim 15

Since claim 15 depends from claim 12, and the applicant submits that claim 12 is allowable, the applicant also submits that any claim dependent therefrom, notably including claim 15, is also allowable. In addition, given that Hartwig wants a hollow annular box, and given that Hartwig also desires a flat upper surface for mating to the rail car, as noted in the quotations given above, the applicant respectfully submits that there is no suggestion, motivation, or incentive to introduce the webs of Cope, (an entirely different type of center plate plug, that works on a different principle), in or with the invention of Hartwig.

Claim 17

Claim 17 has been rejected under 35 USC 102 as being anticipated by Hartwig. Claim 17 calls for the center plate to be monolithic. As noted above, Hartwig says that his invention "... has *for its principle object the provision of a center bearing comprised of more than one part and reduced to a unitary structure by welding.*" (Emphasis added).

Clearly then, by Hartwig's own words, the device is not monolithic, but two parts welded together. The applicant requests reconsideration of the rejection and allowance of the claim.



Claim 18

Claim 18 has been rejected under 35 USC 103 as being obvious given Hartwig and Official Notice of casting as a well known method of metal forming. The applicant does not dispute that casting is a well known method of metal forming. However, as noted above, trying to reproduce Hartwig's invention as a casting would not appear to be a trivial task. The applicant notes that each of Hartwig's claims commences "*A fabricated center plate ...*" That is, while casting may be known in the rail road industry, and well known, there is nonetheless nothing in Hartwig that suggests it, and both Hartwig's description and claims appear to teach against it.

To sustain the current rejection of claim 18 on the basis of Hartwig requires, *inter alia*, (a) taking Hartwig's claimed invention apart; and (b) making the device as a casting, where Hartwig has as his principle object a fabricated assembly. The applicant respectfully submits that neither (a) nor (b) is shown, described or suggested by Hartwig.

Claim 19

Claim 19 has been rejected under 35 USC 102 as being anticipated by Hartwig. Claim 19 calls for the peripheral wall to be circular. Claim 19 depends from claim 12, and, to the extent that claim 12 is allowable, claim 19 is also allowable.

Claim 20

Claim 20 has been rejected under 35 USC 103 as being unpatentable over Hartwig. The applicant respectfully traverses the rejection. Hartwig does not have a radially inward portion that is taller than its connection portion. On the contrary, by inspection of Hartwig's drawings, his hub appears to be slightly shy of, or possibly flush with, the flat upper surface of flange plate **10**, **100**, or **200**. Furthermore, each of Hartwig's flange plates **10**, **100** and **200** would clearly overhang the center plate bowl about its entire periphery. Thus, for at least two reasons, Hartwig does not anticipate claim 20. The applicant requests reconsideration of the rejection and allowance of the claim.

The Office Action takes Official Notice that the use of a center plate bowl for receiving a center plate is common in the art. The applicant would agree that it is known for the bowl to accommodate *the bearing portion* of the center plate, but does not agree that Official Notice can

be taken that it is known to use a center plate bowl to recenter the entire center place. Nonetheless, the Applicant respectfully submits that Hartwig is still missing at least two features of claim 20, and therefore does not anticipate the claim.

Conclusion

The Applicant respectfully submits that in view of the foregoing amendments and arguments, the claims 1 – 20 pending in this case are presently allowable. The Applicant therefore requests early and favourable disposition of this application.

Yours very truly,

A handwritten signature in black ink, appearing to read 'KB', is written over a horizontal line.

Ken Bonsfield Reg. No. 40,460  
McCarthy Tétrault LLP

Clean set of claims, as amended, for the convenience of Steve Grant:

1. A center plate for a railroad car, the center plate having an upwardly oriented mounting interface for rigid connection to the railroad car, a radially outermost portion seatable within a center plate bowl of the railroad car truck, a downwardly facing bearing surface mountable in pivotable engagement within the center plate bowl, and an integrally formed central portion for accommodating a king pin, the central portion standing taller than said mounting interface.
2. The center plate of Claim 1 wherein said center plate is a monolith.
3. The center plate of Claim 1 wherein said center plate is a casting.
4. The center plate of Claim 1 wherein said radially outermost portion is an upstanding peripheral wall.
5. The center plate of Claim 4 wherein said upstanding peripheral wall is circular.
6. The center plate of Claim 1 wherein a welding relief is formed radially outwardly adjacent to said abutment face.
7. The center plate of Claim 4 wherein a welding relief is formed radially outwardly adjacent to said abutment face.
8. The center plate of Claim 1 wherein said center plate has an upwardly oriented indexing member operable to discourage mis-orientation of said center plate relative to the railroad car.
9. The center plate of Claim 1 wherein said center plate has:
  - a base plate, said bearing surface being a surface of said base plate;
  - a circular peripheral wall, said radially outermost portion being a radially outwardly oriented portion of said circular peripheral wall;
  - said circular peripheral wall extending upwardly of said base plate;
  - at least one web standing upwardly of said base plate and extending between said central portion and said circular peripheral wall; and
  - said indexing member being a super-elevated portion of said web.
10. A center plate casting for a railroad car, the casting having a radially outermost portion surrounding said bearing surface, said radially outermost portion being seatable entirely radially within a center plate bowl of a railcar truck, said radially outermost portion having an upwardly

oriented abutment for rigid connection to the railroad car, a bearing surface for placement upon a railcar truck and a hollow central portion standing taller than said abutment.

11. A center plate casting for a railroad car, the center plate casting having:
  - a bearing portion for seating in pivotally movable engagement within a center plate bowl of a railroad car truck;
  - an interface for rigidly mounting to a railroad car;
  - a radially outermost portion seatable within a center plate bowl
  - a hollow central portion standing taller than, and radially inward of, the interface;
  - and
  - the casting being free of any member extending a radially greater distance than said radially outwardly located portion.
12. A center plate for a railroad freight car, the center plate being for installation between a central sill member of the rail road car and a center plate bowl of a railroad car truck, said center plate comprising:
  - a base portion having a bearing surface pivotally engageable in the center plate bowl of the truck;
  - a peripheral wall extending upwardly of said bearing surface, said wall having an attachment interface for rigid mounting of said center plate to the central sill member of the railroad car; and
  - a central hollow member standing upwardly of said base portion;
  - said hollow member being taller than said peripheral wall;
  - said hollow member having a passage defined therein to accommodate a railroad car king pin; and
  - said center plate being free of any member extending radially beyond said peripheral wall.
13. The center plate of Claim 12 wherein said center plate has at least one indexing member engageable with said central sill member to establish angular orientation of said center plate relative to said central sill member.
14. The center plate of Claim 12 wherein said peripheral wall has a welding relief extending thereabout adjacent to said attachment interface.
15. The center plate of Claim 12 wherein upstanding web members extend between said central hollow member and said peripheral wall.

16. The center plate of Claim 13 wherein upstanding web members extend between said central hollow member and said peripheral wall, and said indexing member is a super-elevated portion of one of said web members.
17. The center plate of Claim 12 wherein said center plate is a monolith.
18. The center plate of Claim 12 wherein said center plate is a casting.
19. The center plate of Claim 12 wherein said peripheral wall is a circular wall extending about said base portion.
20. The combination of a railroad car and a railroad car truck therefore wherein:  
the railroad car has a center plate mounted thereto;  
the truck has a center plate bowl into which the center plate seats in pivotally  
moveable engagement;  
said center plate having a connection portion by which it is rigidly attached to said  
railroad car;  
said center plate having a radially inward portion;  
said radially inward portion standing taller than said connection portion; and  
said center plate being free of any portion overhanging said center plate bowl.